

INSTALLATION INSTRUCTIONS

AECON818-1 MODULATING HORIZONTAL ECONOMIZER

FOR SG/SH/SA 24-60 UNITS

Economizers are used with SG/SH/SA 24-60 units for automatic sensor-controlled introduction of outdoor air into the system through an electro-mechanically controlled damper.

! WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer, service agency or gas supplier.

! CAUTION

Danger of sharp metallic edges. Can cause injury. Take care when servicing unit to avoid accidental contact with sharp edges.

Step 1:

Check for correct number of parts. See list below.

- 1 - Economizer Assembly w/ Filter
- 1 - Wiring Diagram Sticker
- 8 - #10 - 16 x ½ Hex Tec Screws

Step 2:

Disconnect all power to unit.

ADAPTOR PANEL
(MATES TO RETURN OPENING)

FRESH AIR INTAKE HOOD

RETURN DAMPER SECTION

LOGIC MODULE & HARNESS

CONTROL AND FILTER ACCESS PANEL

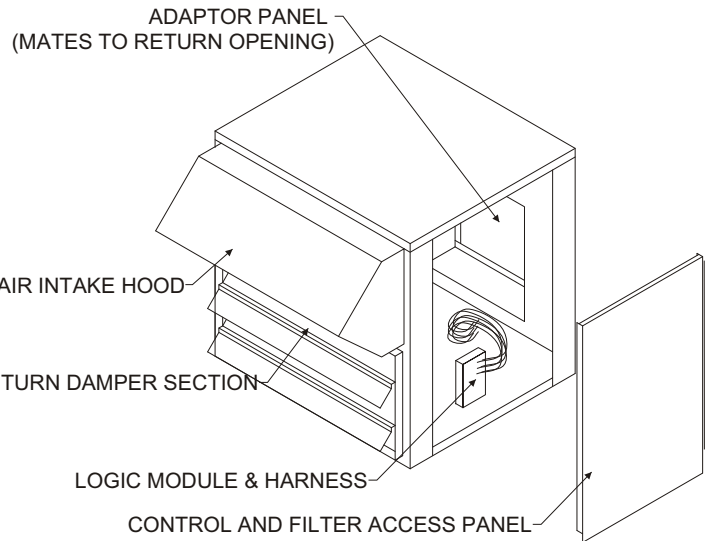


Figure 1

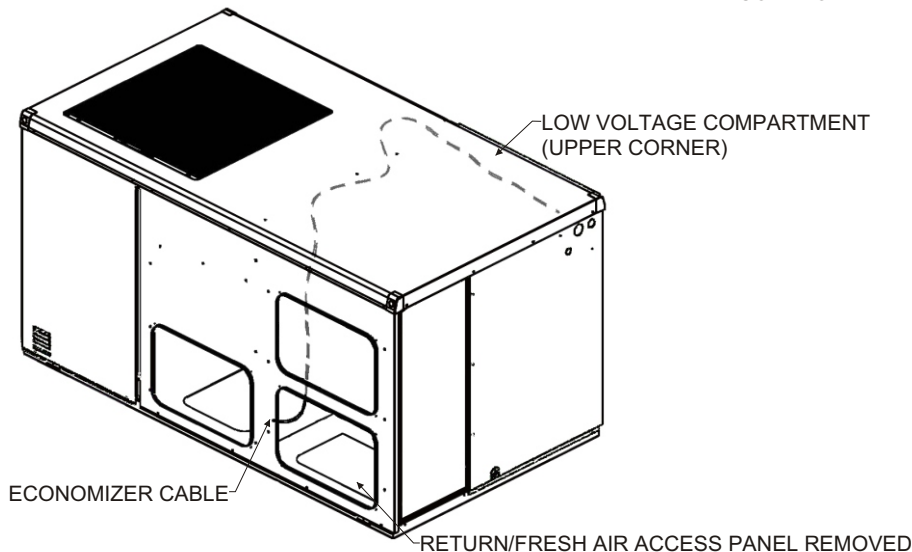


Figure 2

Step 3:

Economizer cable shown in Figure 2 is shipped with harness shown in Figure 1.

Step 4:

Remove the return/fresh air access panel. If cable is not already installed, route the cable through the unit as shown. See Figure 2.

Step 5:

Connect harness of economizer to mating harness shown in Figure 2.

**INSTALLATION INSTRUCTIONS
AECON818-1 MODULATING HORIZONTAL ECONOMIZER
FOR SG/SH/SA 24-60 UNITS**

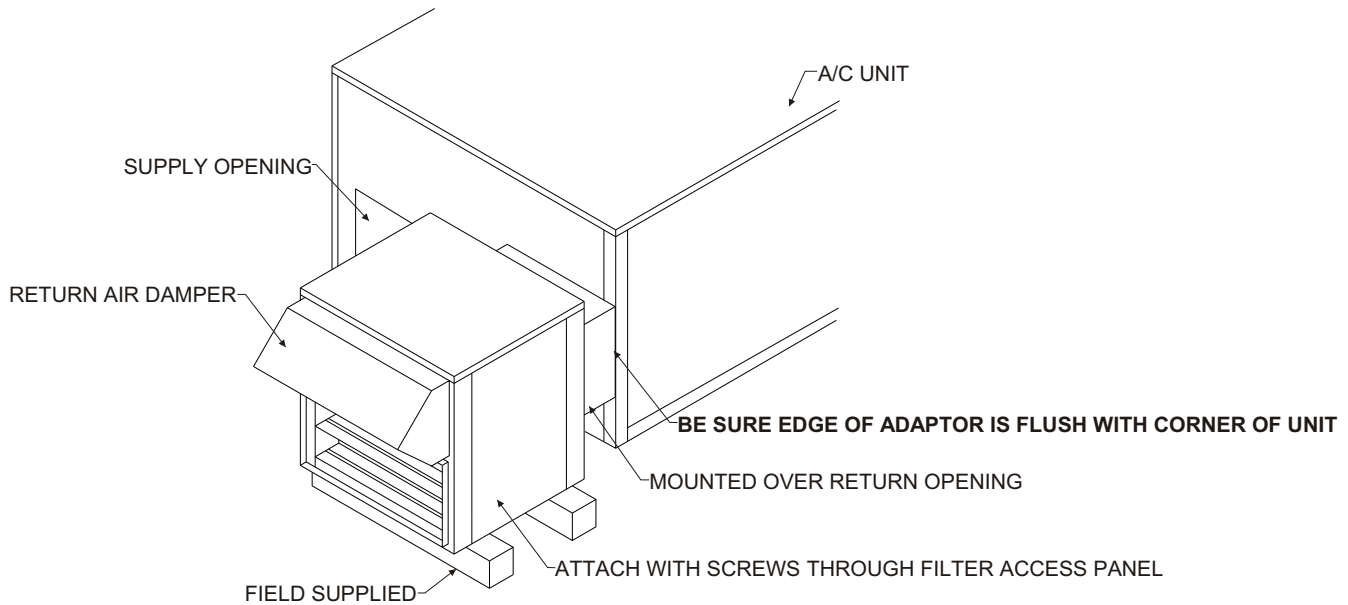


Figure 3

Step 6:

Remove start-up air filter from Economizer. Secure Economizer to unit using (8) screws as shown in Figure 3. Replace filter then filter access panel.

Step 7:

Replace control panel of economizer. Install return air duct cover, removed in Step 4, over bottom duct opening in unit.

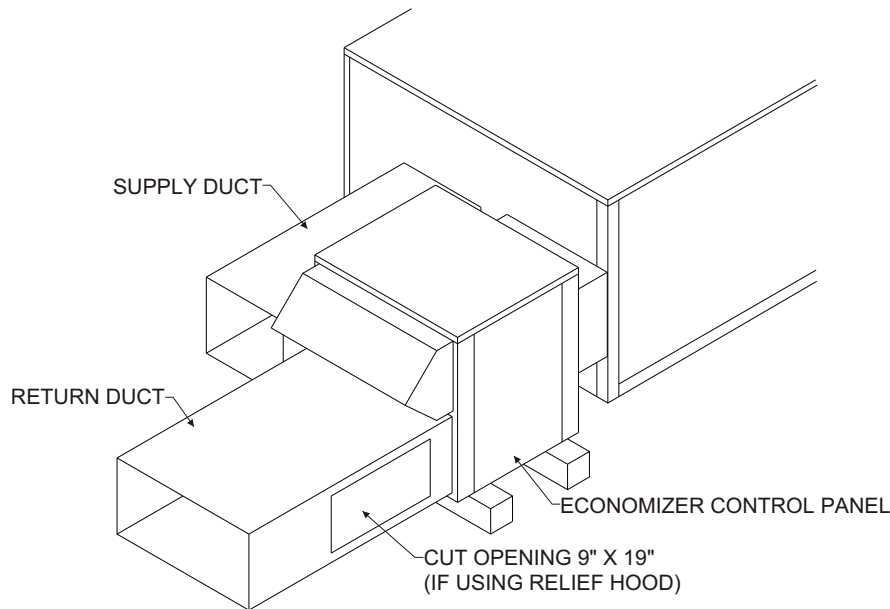


Figure 4

Step 8:

Attach and seal weather tight return duct to Economizer. Duct size should be 12" x 24" I.D..

Step 9:

If the barometric relief is to be installed cut a 9" x 19" hole in the return air duct near Economizer as shown in Figure 4.

(Note: Barometric Relief (23H06) must be ordered separately.)

**INSTALLATION INSTRUCTIONS
AECON818-1 MODULATING HORIZONTAL ECONOMIZER
FOR SG/SH/SA 24-60 UNITS**

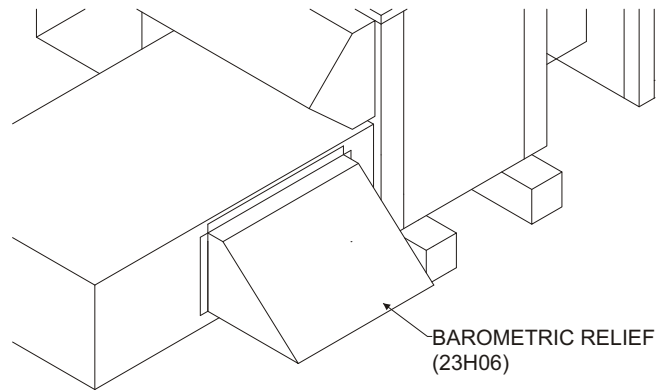


Figure 5

Step 10:

Secure pressure relief damper near Economizer over hole in return air duct using (4) screws. Refer to Figure 5.

Step 11:

Place the adhesive backed wiring diagram on the control access panel by the unit diagram. Reinstall control access panel.

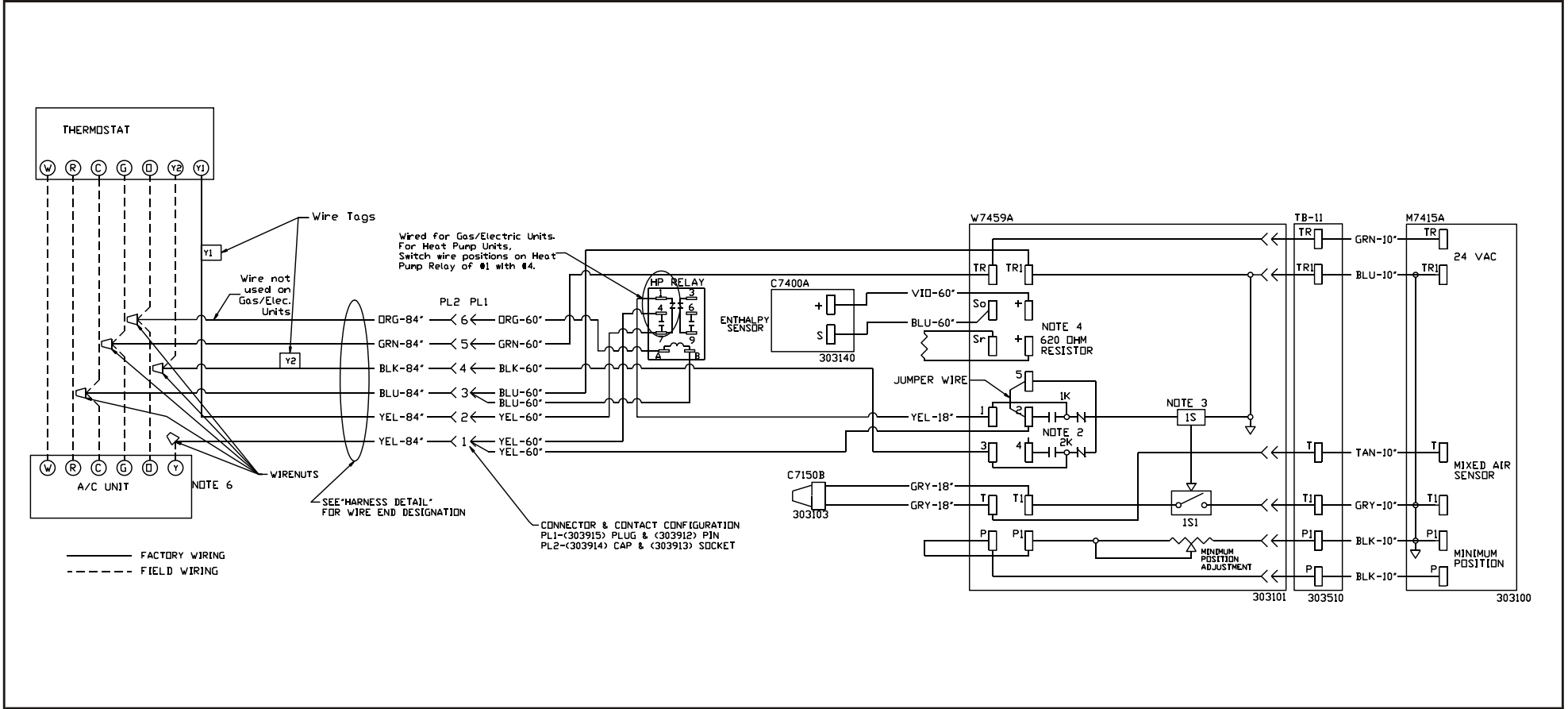
Step 12:

Make the connection of the Economizer plug to the unit Economizer plug. See the enclosed control specification data for operation and check out.

Step 13:

Turn power back on to the unit.

HARNES DETAIL		COMPONENT CODE	WIRE COLOR CODE				Revision	Change	Date
E# = WIRE END DESIGNATION		Economizer	BLK	Black	BLU	Blue	A	Changed Wire Length	07-10-06
E6	Wire Nut	C7150B	BRN	Brown	GRN	Green			
E9	Socket Contact	C7400A	GRY	Grey	ORG	Orange			
E6 — YEL — 84" — E9		M7415A	PNK	Pink	RED	Red			
E6 — YEL — 84" — E9		PL1	TAN	Tan	VIO	Violet			
E6 — BLU — 84" — E9		PL2	WHT	White	YEL	Yellow			
E6 — BLK — 84" — E9		TB-11							
E6 — GRN — 84" — E9		W7459A							
E6 — ORG — 84" — E9									



Notes:

1. Unit wiring shown as reference only. Check unit wiring for actual unit wiring.
2. Relays 1K and 2K actuate when the Outdoor Air Enthalpy is lower than the Return Air Enthalpy.
3. 1S is an electronic switch which closes when powered by a 24 VAC input.
4. Factory installed resistor should be removed only if C7400 Differential Enthalpy Sensor is added.

**Modulating Horizontal Economizer
SG/SH/SA 24-60**

Date: July 10, 2006

Supersedes: 05-19-06

Drawn by:

Unit # 05-324-17

Diagram# 0532417W